

CLAIMS

1. A ceramic filter comprising:

honeycomb segments bonded together, being partitioned by porous
5 walls, and having vents for exhaust gas to flow therethrough from an inlet to
an outlet in a longitudinal direction,

wherein each of the honeycomb segments includes first vents and
second vents alternately placed,

wherein the first vents are filled at the inlet and are open at the
10 outlet,

wherein the second vents are open at the inlet and are filled at the
outlet,

wherein each of the honeycomb segments has at the inlet an end
surface having a central portion and a peripheral portion enclosing the
15 central portion,

wherein the second vents in the central portion are additionally filled
at the inlet,

wherein the central portion is larger in vent-filling percentage than
the peripheral portion at the inlet.
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2. The ceramic filter according to claim 1,

wherein the central portion has an additional filling percentage set
on the condition that increase percentage of pressure loss of the entire filter,
increasing with an amount of additional filling, is a predetermined value or
25 less and that decrease percentage of the maximum temperature during
burning of soot accumulated in the filter is a predetermined value or more.

3. The ceramic filter according to claim 1,

wherein the central portion has an additional filling percentage set
30 within a range of 0.1 to 10 % to a total area of an end surface of each

honeycomb segment at the inlet.

4. The ceramic filter according to claim 2,

5 wherein the central portion has an additional filling percentage set
within a range of 0.1 to 10 % to a total area of an end surface of each
honeycomb segment at the inlet.